

Fig. 1

MuniAuction

The First Municipal Bond Auction Website

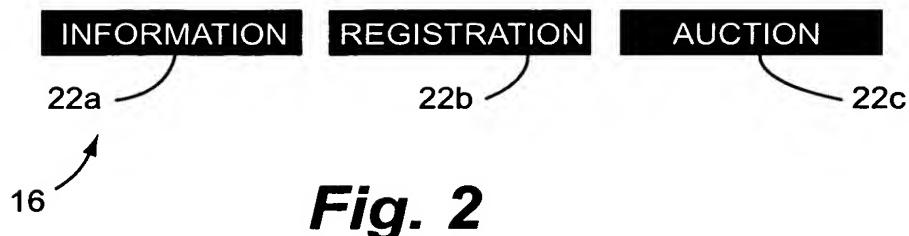


Fig. 2

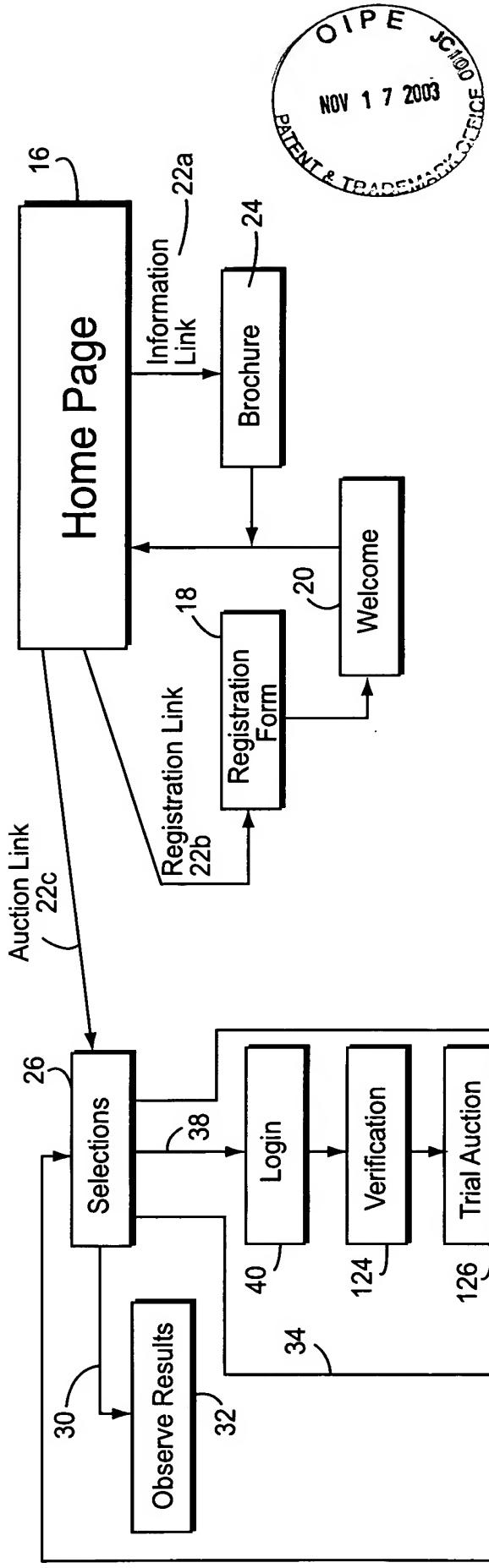
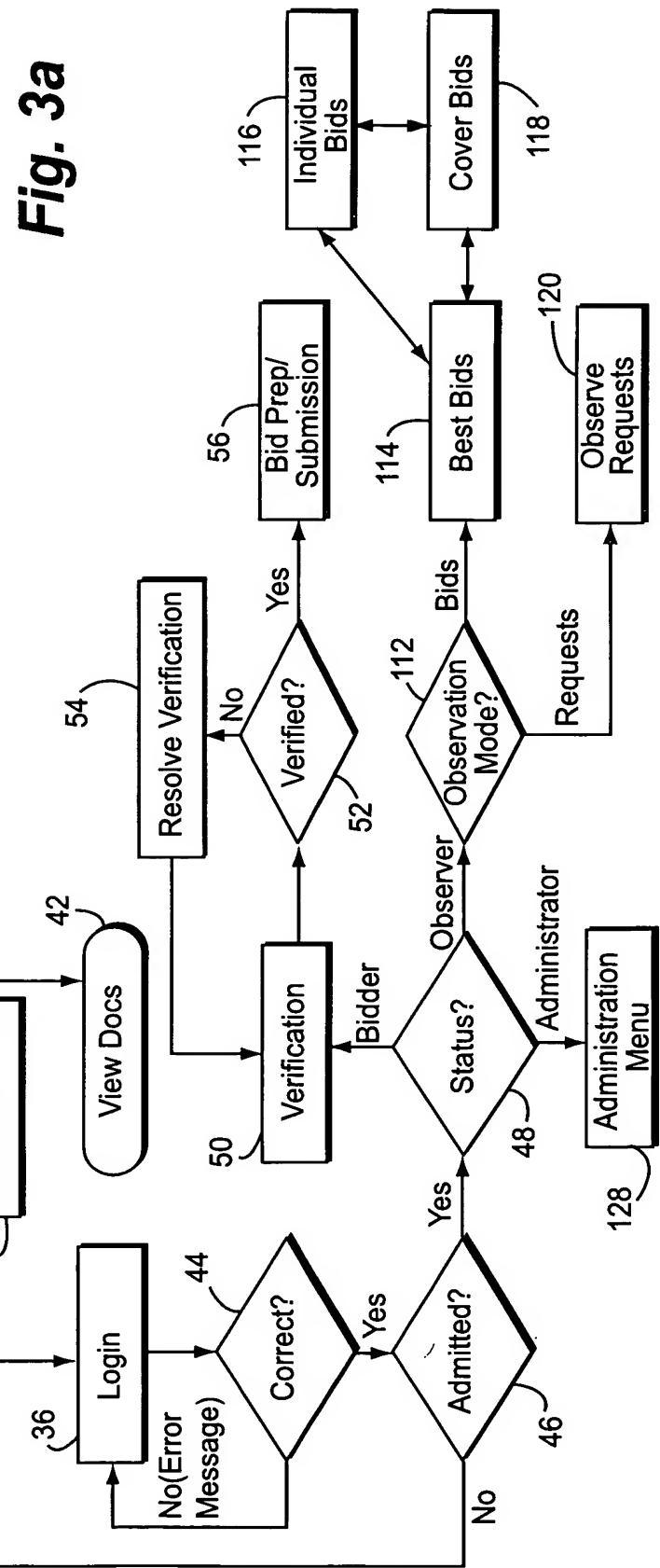


Fig. 3a



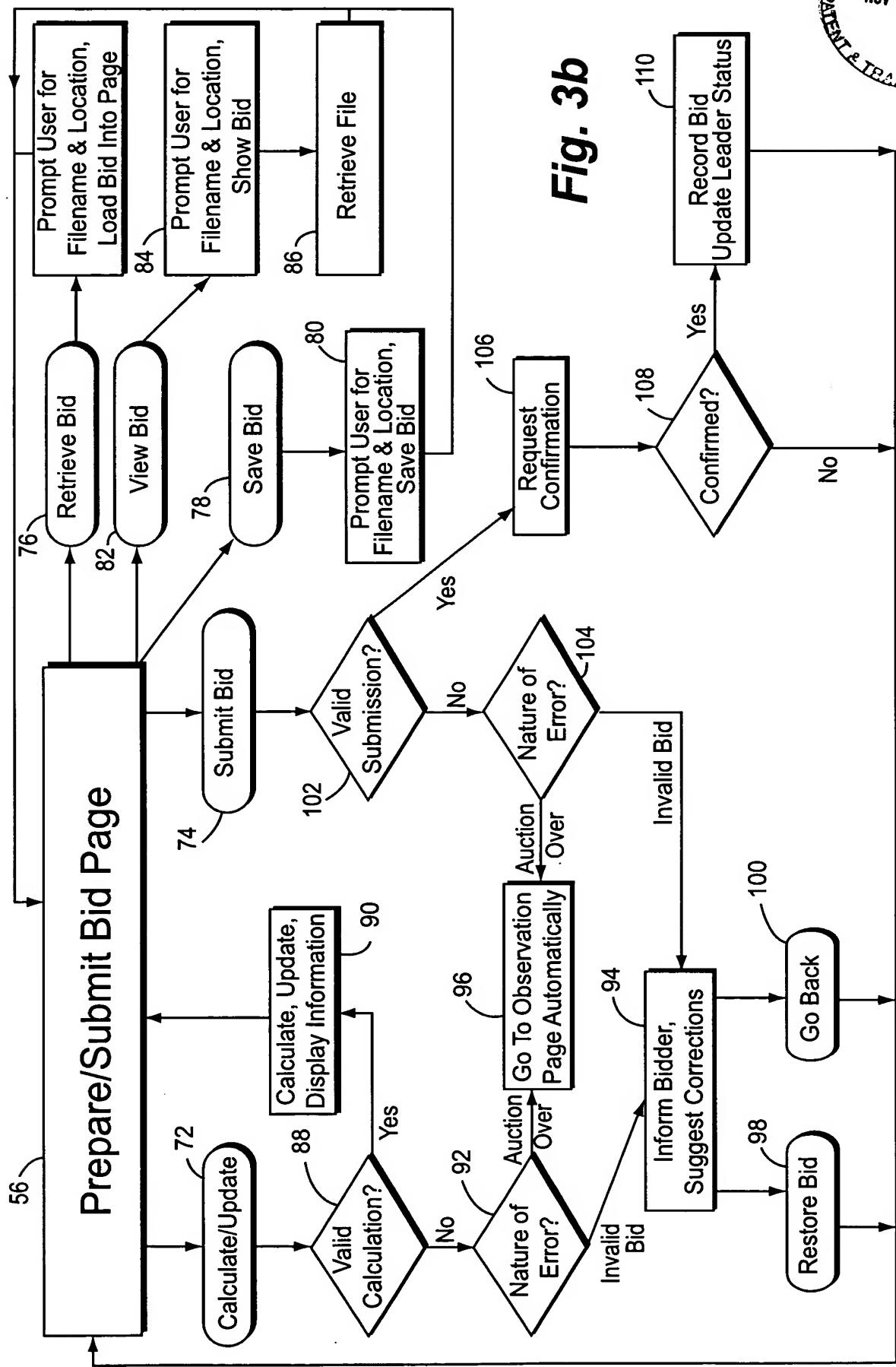


Fig. 3b



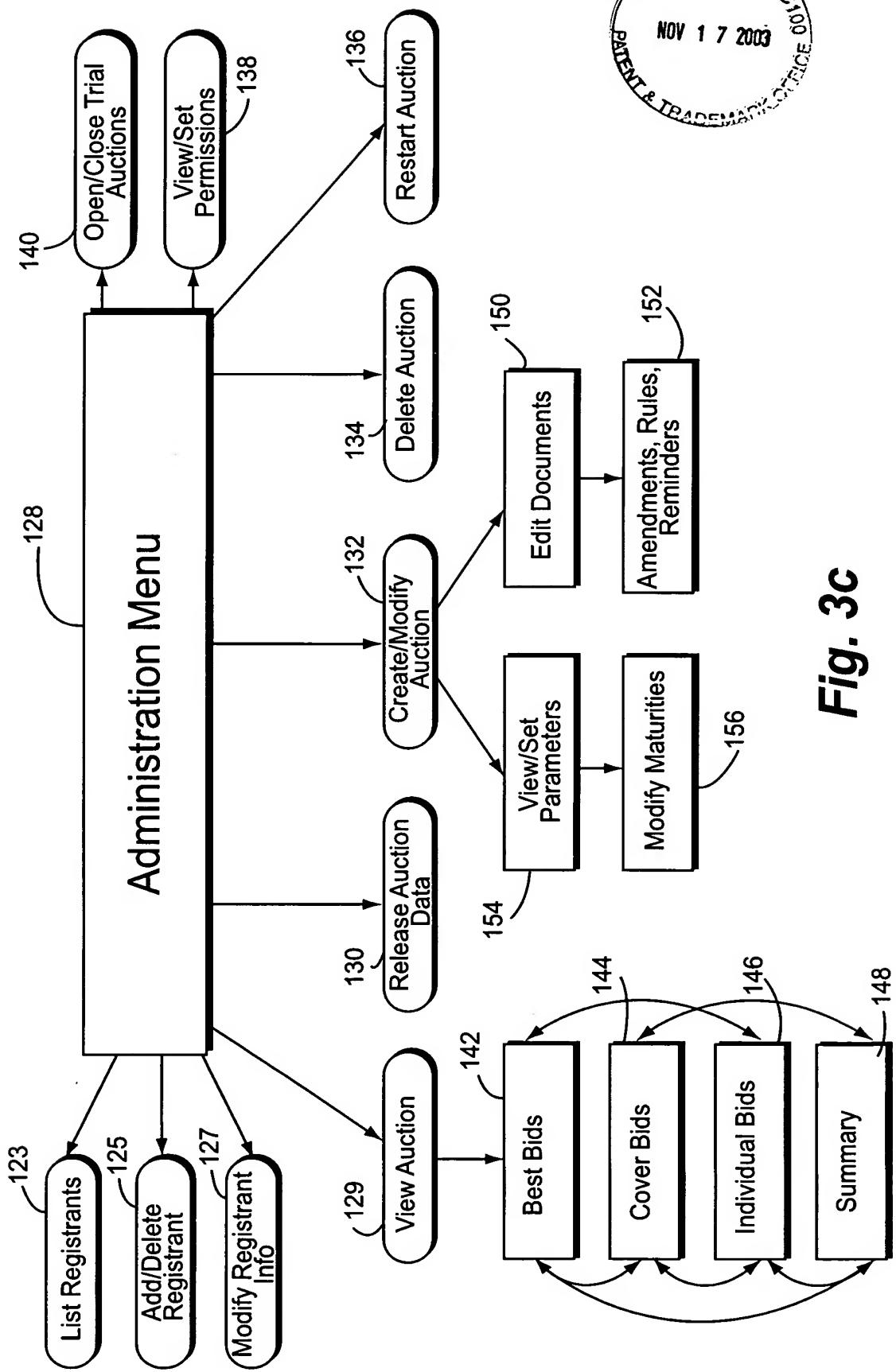


Fig. 3C



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REGISTRATION QUESTIONS (Fields displayed in **bold** below are required.)

FIRST NAME:

LAST NAME:

ORGANIZATION:

ADDRESS (1st Line):

ADDRESS (2nd Line):

CITY:

STATE:

ZIP:

TELEPHONE:

TELEFAX:

E-MAIL:

**MOTHER'S MAIDEN
NAME:** (for security reasons only, e.g., verify
your identity by phone)

Fig. 4



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Selections

Issuer	State	Description	Size*	Auction Date*	Start Time*
City of Trial Auction (All-or-None)	OR	Limited Tax Revenue Bonds 1998 Series A	\$29,000,000	Any Day	Any Time
(Amendments modified 4/20/98 @ 10:14 pm)					
		Enter Auction	View Notice of Sale	View Amendments	View POS
(Amendments modified 4/20/98 @ 10:14 pm)					
		Enter Auction	View Notice of Sale	View Amendments	View POS
City of Portland (All-or-None)	OR	Limited Tax Revenue Bonds 1998 Series A	\$29,000,000	4/21/98	11:30 am EDT
(Amendments modified 4/20/98 @ 10:14 pm)					
		Observe Results	View Notice of Sale	View Amendments	View POS
		Request Admission			
City of Portland (Maturity-by-Maturity)	OR	Limited Tax Revenue Bonds 1998 Series A	\$29,000,000	4/21/98	11:30 am EDT
(Amendments modified 4/20/98 @ 10:14 pm)					
		Observe Results	View Notice of Sale	View Amendments	View POS
		Request Admission			

Go: [MuniAuction Home Page](#), [Rules](#) (modified 4/16/98 @5:01 pm), [Instructions](#),
to: [Reminders](#), [Results](#)

Fig. 5



Fig. 6

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Observe Auction: Portland.1998A.MBM MBM Best Bids

Auction Date	Auction Type	Start	End	Time Of Last Update	Auction Status
Tue., Apr 21, 1998	MBM	11:30 am	12:00 pm	11:13:05 am EDT	Over

\$29,000,000
City of Portland, Oregon
Limited Tax Revenue Bonds
1998 Series A

Best MBM TIC:	Best AON TIC:	Best AON Bidder:
4.9574 % (Not Winner)	4.9526 % (Winner)	Salomon Smith Barney (Winner)

[Refresh](#)

Principal

Due	Amount*	Coupon	Price	Best Yield	Best MBM Bidder
April 1, 2000	\$1,000,000	3.900%	99.703%	4.063%	U.S. Bancorp Securities, Inc.
April 1, 2001	\$1,040,000	4.000%	99.578%	4.155%	U.S. Bancorp Securities, Inc.
:	:	:	:	:	:
April 1, 2016	\$2,050,000	5.000%	98.004%	5.172%	ADVEST INC.
April 1, 2017	\$2,160,000	5.100%	98.710%	5.208%	U.S. Bancorp Securities, Inc.
April 1, 2018	\$2,270,000	5.125%	99.032%	5.203%	CIBC-Oppenheimer

[Refresh](#)

Click below to see other bidder results

LEBE-DS	WILL-MD	PRAG-RM	BELL-ER	GEOR-KD	HUTC-RD	FIRS-RE
FIDE-DD	ADVE-JL	INTE-SF	RAYM-JR	A.G.-GH	SEAT-MA	U.S.-KS
MORG-TB	COMM-CB	EDWA-JC	ARTE-BW	CIBC-WH	Cover Bids	Bid Summary

Go [Notice of Sale, Amendments](#) (modified 4/20/98 @ 10:14 pm), [POS](#), [Rules](#) (modified to: 4/16/98 @ 5:02 pm) [Instructions](#), [Reminders](#), [Selections](#), [Results](#)

[Exit](#)

[MuniAuction Home Page](#)

to:



Fig. 7

Login

36/40

Auction Name: AON.TRIAL.AUCTION.SeriesA

Please go to Registration page if you have not yet registered with MuniAuction

Enter your ID number:

Enter your password:

Note: Password is Case-Sensitive

Enter

as a bidder
 as an observer

Exit to: MuniAuction Home Page

Fig. 8

Acknowledgement

In order to view this POS, you must first acknowledge that you are eligible to bid(i.e., you represent either a bank or NASD registered broker-dealer)

I Am Eligible

I Am Not Eligible

This shall not constitute a solicitation or offer to bid or purchase these securities to such persons or in such jurisdictions to which such offerings or solicitations are not permitted. An offer or solicitation shall be made only by means of the Preliminary Official Statement.

Back to: Selections Page



Fig. 9

Verification

50 ←

Your name is **Edward Pencoske**.

Your firm is **Thorp Reed & Armstrong**.

This auction is **AON.TRIAL.AUCTION.1998A**.

This auction is an **All-Or-None** auction.

Please verify that the above information is correct.

YES NO

Have you read the **Notice of Sale** and related **Amendments** (modified 4/20/98 @10:14 pm), if any, and do you agree to abide by the terms and conditions?

YES NO

Have you read the **Preliminary Official Statement**?

YES NO

Have you read the **Rules of MuniAuction** (modified 4/16/98 @5:01 pm) and do you agree to abide by them?

YES NO

Enter Auction

Go **Notice of Sale**, **Amendments** (modified 4/20/98 @10:14 pm), **POS**, **Rules** (modified to: 4/16/98 @5:01 pm) **Instructions**, **Reminders**, **Selections**, **Results**

Exit to: **MuniAuction Home Page**



Auction

56

Auction Date	Auction Type	Start	End	Time of Last Update	Auction Status
Mon., Feb 23, 1998	MBM	9:30 am	10:00 am	3:10:16 pm	Over

\$91,760,000*

The Pittsburgh Water and Sewer Authority, Pennsylvania
Water and Sewer System First Lien Revenue Bonds,
Series A of 1998

Name of firm submitting bid: MuniAuction, Inc.

This auction is competing with Pittsburgh Water and Sewer.SeriesA.AON.

70

As of 3:10:16pm, bids have been submitted for all maturities.

72

74

<input type="button" value="Calculate/Update"/>	IMPORTANT: Bidders must click the "Calculate/Update" button frequently during auction to update "Time of Last Update". Also, clicking "Calculate/Update" does not result in bid submission.					<input type="button" value="Submit Bid"/>
68 Due	66 Principal Amount*	Coupon	Enter Either:		70 Your Status	76 Submitted Cpn-PP--YTM
September 01, 2017	\$8,275,000	%	%	OR	%	Not Winner
September 01, 2018	\$8,695,000	%	%	OR	%	Not Winner
⋮	⋮	⋮	⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮	⋮
September 01, 2025	\$12,370,000	%	%	OR	%	Not Winner

<input type="button"/>	IMPORTANT: Bidders must click the "Calculate/Update" button frequently during auction to update "Time of Last Update". Also, clicking "Calculate/Update" does not result in bid submission.	<input type="button"/>
------------------------	---	------------------------

Go to: [Notice of Sale, Amendments](#) modified 2/20/98 @ 11:23am, [POS, Rules](#) modified 2/2/98 @ 11:40am [Instructions, Reminders, Selections](#)
Exit to: [MuniAuction Home Page](#)

Fig. 10



Auction

56

Auction Date	Auction Type	Start	End	Time of Last Update	Auction Status
Mon., Feb 23, 1998	AON	9:30 am	10:00 am	3:08:28 pm	Over

\$91,760,000*

The Pittsburgh Water and Sewer Authority, Pennsylvania
Water and Sewer System First Lien Revenue Bonds,
Series A of 1998

Name of firm submitting bid: MuniAuction, Inc.

Purchase Price: \$ 77
(not to be less than \$89,466,000.00)

Your TIC: NO BID Your Status: Not Winner

70 This auction is competing with Pittsburgh Water and Sewer.SeriesA.MBM.

As of 3:08:28 pm, there has been at least one all-or-none bid submitted in this auction.

72	<input type="button" value="Calculate/
Update"/>	IMPORTANT: Bidders must click the "Calculate/Update" button frequently during auction to update "Time of Last Update". Also, clicking "Calculate/Update" does not result in bid submission.			<input type="button" value="Submit Bid"/>	74
	68 Due	66 Principal Amount*	Serial/ Sinker Term	Coupon	Enter Either:	
	September 01, 2017	\$8,275,000	Serial ▼	%	% OR %	%
	September 01, 2018	\$8,695,000	Serial ▼	%	% OR %	%
	⋮	⋮	⋮	⋮	⋮	⋮
	September 01, 2025	\$12,370,000	Serial ▼	%	% OR %	%
⋮ ⋮ ⋮ ⋮ ⋮ ⋮ ⋮						
IMPORTANT: Bidders must click the "Calculate/Update" button frequently during auction to update "Time of Last Update". Also, clicking "Calculate/Update" does not result in bid submission.						

Go to: [Notice of Sale, Amendments](#) modified 2/20/98 @ 11:23am, [POS, Rules](#) modified 2/20/98 @ 11:40am [Instructions, Reminders, Selections](#)
Exit to: [MuniAuction Home Page](#)

Fig. 11



Error

Sorry. Your bid was invalid for the following reasons:

1. For the Sinking Fund redemptions maturing on September 01, 2022 you are not allowed to enter a yield.
2. For the Sinking Fund redemptions maturing on September 01, 2022 you have entered price or coupon values that are not identical to the values for the corresponding Term bonds maturing on September 01, 2023.
3. You specified bonds maturing on September 01, 2020 as Term bonds, but you did not specify bonds for the preceding maturity as Sinking Fund redemptions (i.e., "Sinker").
4. You specified bonds maturing on September 01, 2018 as Sinking Fund redemptions, but you did not specify the subsequent maturity as either Sinking Fund redemptions (i.e., "Sinker") or Term bonds.

To specify any maturity as a term bond maturity, you must specify one or more preceding maturities as Sinking Fund redemptions.

5. For the bonds maturing on September 01, 2017 you entered a coupon less than 1.00%.
6. Your Purchase Price must not be less than \$89,466,000.00.
7. For the bonds maturing on September 01, 2017 your coupon entry of 0% does not conform to the rules of the auction. Coupon entered must be non-zero.

To return to the Auction Page with your most recent inputs, click the BACK button below.

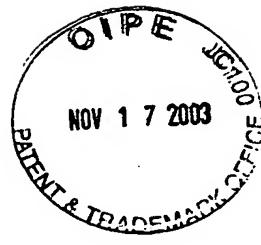
BACK

To restore the Auction Page to your last successfully submitted bid, click the Restore button below (Warning: If no bid has yet been successfully submitted, clicking the Restore button will return you to a blank Auction Page).

RESTORE

Go to: [Notice of Sale, Amendments](#) (modified 2/20/98 @ 11:23 am, [POS](#), [Rules](#) (modified 2/20/98 @ 11:40 am) [Instructions](#), [Reminders](#), [Selections](#)

Exit to: [MuniAuction Home Page](#)



Confirmation

Auction Date	Auction Type	Start	End	Time Of Last Update	Auction Status
Any Day	AON			4:57:37 pm	

\$91,760,000*

AON Trial Auction (Series A), Pennsylvania
Water and Sewer System First Lien Revenue Bonds,
Series A of 1998

Name of the firm submitting bid: MuniAuction, Inc.

Are you sure you want to submit the following bid?

[No, Go Back](#)

[Yes, Submit Bid](#)

Purchase Price: \$90,000,000.00

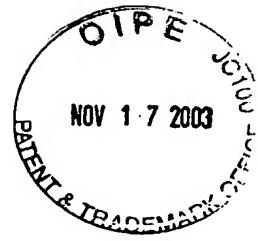
Your TIC: 6.0803 %

Due	Principal Amount*	Serial/ Sinker/ Term	Coupon	Price	Yield
Beginning of Term group					
September 01, 2017	\$8,275,000	Sinker	5.000%	100.000%	...
September 01, 2018	\$8,695,000	Sinker	5.000%	100.000%	...
September 01, 2019	\$9,140,000	Sinker	5.000%	100.000%	...
September 01, 2020	\$9,610,000	Sinker	5.000%	100.000%	...
September 01, 2021	\$10,105,000	Term	5.000%	100.000%	5.000%
End of Term group					
September 01, 2022	\$10,630,000	Serial	6.000%	100.000%	6.000%
Beginning of Term group					
September 01, 2023	\$11,180,000	Sinker	7.000%	100.000%	...
September 01, 2024	\$11,755,000	Sinker	7.000%	100.000%	...
September 01, 2025	\$12,370,000	Term	7.000%	100.000%	7.000%
End of Term group					

Go to: [Notice of Sale, Amendments](#) (modified 2/20/98 @ 11:23 am, [POS](#), [Rules](#) (modified 2/20/98 @ 11:40 am) [Instructions](#), [Reminders](#), [Selections](#)

Exit to: [MuniAuction Home Page](#)

Fig. 13



Administration

Auction Permissions: Pittsburgh Water And Sewer SeriesA.AON

[Observe All](#)

[Change Auction Permissions](#)

[Return to Menu](#)

Admission Status	Allow Bid	Allow Obs	ID Number	Organization
Requested	<input type="checkbox"/>	<input type="checkbox"/>	MUNI-DV	MuniAuction, Inc.
Requested	<input type="checkbox"/>	<input type="checkbox"/>	SHOD-RO	The Shodor Education Foundation
	<input type="checkbox"/>	<input type="checkbox"/>	CMU-DH	CMU

• • • •

• • • •

• • • •

Requested	<input type="checkbox"/>	<input type="checkbox"/>	ONLI-KO	OnLine Partners
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SHOD-MS	Fulcrum
	<input type="checkbox"/>	<input type="checkbox"/>	TEST-MT	Test, Inc.

[Change Auction Permissions](#)

[Return to Menu](#)

Fig. 14



Administration

Create New Auction

Date of Auction:

Month Day Year

Start time: : End time: :

Settlement Date:

Month Day Year

Dated Date:

Month Day Year

Date of First Interest payment:

Month Day Year

First Optional Call Date:

Month Day Year

Good Faith Deposit: \$

Clearing Agent Fee: costs per \$1,000 bond

Overnight Loan Charges: costs per \$1,000 bond

Auction Type

- Trial Auction
- Live Auction

Options:

All-or-None

Minimum Allowable Purchase Price: %

- Allow Serials/Sinkers/Terms
- Allow Serials Only

Maturity-by-Maturity

Display Best TIC/Yield and Status

- Display Status but Hide Best TIC/Yield
- Hide Best TIC/Yield and Status

Auction Bidding Method:

- Coupon and Price
- Coupon And Yield
- Coupon and Price or Yield

Competition

- No Competition.
- This auction will compare with:

Bid Restrictions:

- Single Bid
- Multiple Bids

Maximum Allowable Reoffering Price	<input type="text"/> %
Minimum Allowable Reoffering Price	<input type="text"/> %
Maximum Allowable Coupon	<input type="text"/> %
Minimum Allowable Coupon	<input type="text"/> %
Ascending Yields Required	
Ascending Yields Not Required	
Zero Coupons Allowed	
Zero Coupons Not Allowed	
Zero Coupons Required	
Total to Display: <input type="text"/>	
No restrictions on coupons	
Coupons must be multiples of:	
1/8th of 1%	
1/20th of 1%	
Either 1/8th or 1/20th of 1%	
Allow All bids	
Allow Better Bid Only	

Number of maturities to be offered:

Auction names:

Issuer:

County (If applicable):

State:

Auction Description:

Fig. 15